



SVC347

Varactor Diode (IOCAP) for AM Receiver Electronic Tuning

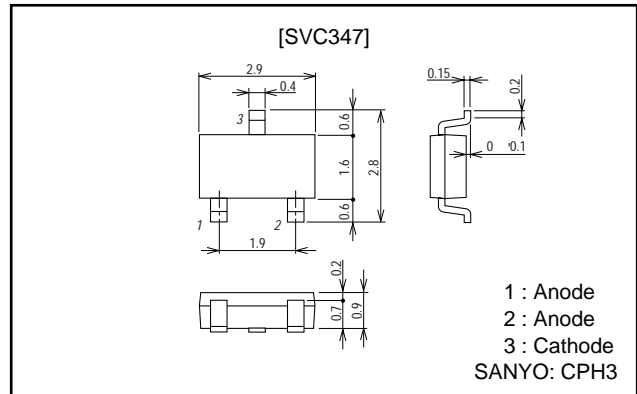
Features

- Twin type varactor diode for AM electronic tuning use.
- Miniaturization and high-integration of tuner sets can be easily achieved due to the small package.
- High capacitance ratio and high quality factor.
- Provided in a tape reel packaging.
- Surface mount type.

Package Dimensions

unit: mm

1291



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse voltage	V_R		16	V
Junction temperature	T_j		125	°C
Storage temperature	T_{stg}		-55 to +125	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse current (One diode)	I_R	$V_R=9V$			100	nA
Interterminal capacitance (Capacitance value of one diode)	C_{1V}	$V_R=1V, f=1MHz *1$	470*		535*	pF
	C_{6V}	$V_R=6V, f=1MHz$		55		pF
	C_{8V}	$V_R=8V, f=1MHz$	20		26	pF
Quality factor	Q	$V_R=1V, f=1MHz$	200			
Capacitance ratio	CR	$C_{1V} / C_{8V}, f=1MHz$	18.5			
Matching tolerance *2	ΔC_m	$(C_{max} - C_{min}) / C_{min} \times 100$ $V_R=1V, f=1MHz$ $V_R=6V, f=1MHz$ $V_R=8V, f=1MHz$			2.5	%
					3.0	%
					3.0	%

*1 : 1MHz signal : 20mVrms

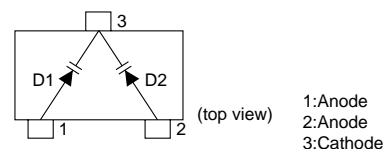
*2 : Matching tolerance between D1 and D2

* : The SVC347 is classified based on C1V capacitance

as shown in the table below :

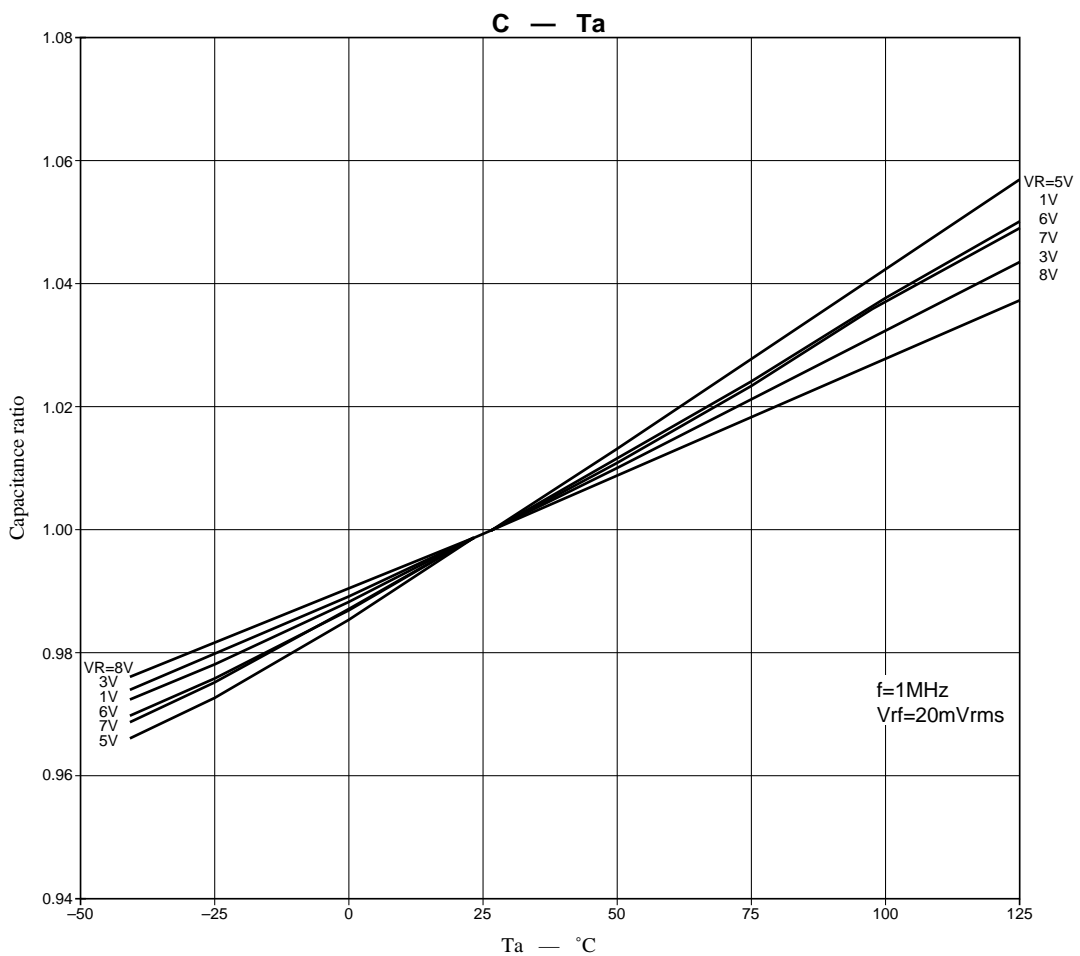
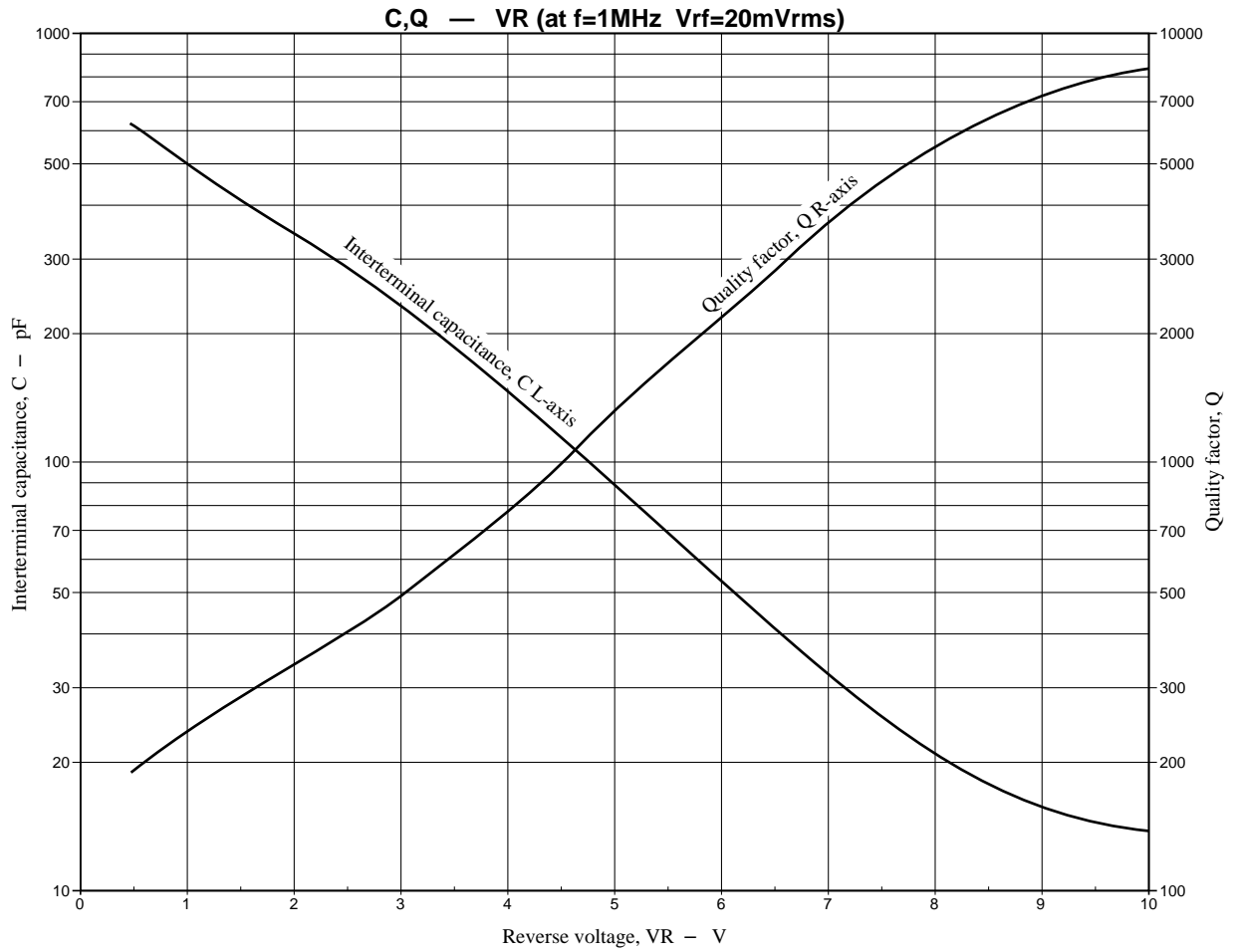
Rank	C1V (pF)
S	470 to 505
T	495 to 535

Electrical Connection



A09978

SVC347



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of October, 1997. Specifications and information herein are subject to change without notice.